5

## **ABSTRACT**

A method of color displacement detection for use in a color image forming apparatus sequentially forming image layers in different colors on a photosensitive member and overlaying the image layers on one after another into a color image on a transferring member. This method includes steps of forming, detecting, and calculating. The forming step forms a predetermined number of mark sets within one circumferential length surface of the transferring member. Each of the predetermined number of mark sets includes a predetermined number of different color marks arranged in a line in a moving direction of the transferring member. The detecting step detects the predetermined number of mark sets formed on the transfer member. The calculating step calculates mean values of displacement amounts of same color marks in different mark sets in the predetermined number of mark sets relative to respectively corresponding reference positions.